

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-50 (Canceled).

Claim 51 (Currently Amended): The photocatalytic member according to Claim [[50]] 52, further comprising an opening on a surface of said member and through a thin-film photocatalytic layer, and wherein a space communicates with the opening in order to be open to the outside of said member by way of the opening.

Claim 52 (Currently Amended): The photocatalytic member according to Claim 50, A photocatalytic member having photocatalytic and color forming properties; said member comprising:

a substrate; and

a laminate deposited on the substrate, which laminate has a plurality of thin-film photocatalytic layers, each consisting of a photocatalytic material, and a plurality of thin-film support layers;

wherein the plurality of thin-film photocatalytic layers and the plurality of thin-film support layers alternate with each other and contact sequentially at surface areas, wherein each thin-film support layer has a smaller surface area than the surface area of the contacting thin-film photocatalytic layers, leaving a space between adjacent photocatalytic layers and next to a support layer, said space being open to the outside of said member, the thin-film photocatalytic layer nearest the substrate being the lowermost of said thin-film photocatalytic layers, the remaining layers being sequentially more distant from the substrate; and

wherein said plurality of thin-film photocatalytic layers consist of titanium dioxide.

Claim 53 (Currently Amended): The photocatalytic member according to Claim [[50]] 52, wherein said plurality of thin-film support layers are made of one member selected from the group consisting of metals, semiconductors and insulators, each with a melting point of 400°C or higher.

Claim 54 (Previously Presented): The photocatalytic member according to Claim 51, wherein said openings are shaped like parallel grooves.

Claim 55 (Previously Presented): A photocatalytic member having photocatalytic and color forming properties; said member comprising:

a substrate; and
a laminate deposited on the substrate, which laminate has a plurality of thin-film photocatalytic layers, each consisting of a photocatalytic material, and a plurality of thin-film support layers;

wherein the plurality of thin-film photocatalytic layers and the plurality of thin-film support layers alternate with each other and contact sequentially at surface areas, wherein each thin-film support layer has a smaller surface area than the surface area of the contacting thin-film photocatalytic layers, leaving a space between adjacent photocatalytic layers and next to a support layer, said space being open to the outside of said member, the thin-film photocatalytic layer nearest the substrate being the lowermost of said thin-film photocatalytic layers, the remaining layers being sequentially more distant from the substrate, and

further comprising an opening on a surface of said member and through a thin-film photocatalytic layer, and wherein a space communicates with the opening in order to be open

to the outside of said member by way of the opening, wherein said opening is circular, elliptical or polygonal.

Claim 56 (Previously Presented): The photocatalytic member according to Claim 51, wherein said opening comprises a plurality of openings disposed at uniform intervals.

Claim 57 (Withdrawn): The photocatalytic member according to Claim 51, wherein said opening comprises a plurality of openings disposed at nonuniform intervals.

Claim 58 (Previously Presented): A photocatalytic member having photocatalytic and color forming properties; said member comprising:

a substrate; and
a laminate deposited on the substrate, which laminate has a plurality of thin-film photocatalytic layers, each consisting of a photocatalytic material, and a plurality of thin-film support layers;

wherein the plurality of thin-film photocatalytic layers and the plurality of thin-film support layers alternate with each other and contact sequentially at surface areas, wherein each thin-film support layer has a smaller surface area than the surface area of the contacting thin-film photocatalytic layers, leaving a space between adjacent photocatalytic layers and next to a support layer, said space being open to the outside of said member, the thin-film photocatalytic layer nearest the substrate being the lowermost of said thin-film photocatalytic layers, the remaining layers being sequentially more distant from the substrate, and

further comprising an opening on a surface of said member and through a thin-film photocatalytic layer, and wherein a space communicates with the opening in order to be open to the outside of said member by way of the opening, and

wherein said plurality of thin-film support layers are disposed at a center of said spaces to support the thin-film photocatalytic layers and maintain said spaces and each support layer has a circular, elliptical or polygonal cross section when viewed from the surface of said member, and said laminate is deposited on a portion or an entire surface of the substrate.

Claim 59 (Currently Amended): The photocatalytic member according to Claim [[50]] 52, wherein the ~~surface areas of the layers of said laminated~~ plurality of thin-film layers of photocatalytic layers have surface areas ~~material are equal to each other.~~

Claim 60 (Canceled).

Claim 61 (Currently Amended): The photocatalytic member according to Claim [[50]] 52, wherein said plurality of thin-film photocatalytic layers have surface areas becoming larger toward the lowermost thin-film photocatalytic layer.

Claim 62 (Canceled).

Claim 63 (Currently Amended): The photocatalytic member according to Claim [[50]] 52, wherein said plurality of thin-film photocatalytic layers have surface areas becoming smaller toward the lowermost thin-film photocatalytic layer.

Claim 64 (Canceled)

Claim 65 (Currently Amended): The photocatalytic member according to Claim 50,
A photocatalytic member having photocatalytic and color forming properties; said member
comprising:

a substrate; and

a laminate deposited on the substrate, which laminate has a plurality of thin-film
photocatalytic layers, each consisting of a photocatalytic material, and a plurality of thin-film
support layers;

wherein the plurality of thin-film photocatalytic layers and the plurality of thin-film
support layers alternate with each other and contact sequentially at surface areas, wherein
each thin-film support layer has a smaller surface area than the surface area of the contacting
thin-film photocatalytic layers, leaving a space between adjacent photocatalytic layers and
next to a support layer, said space being open to the outside of said member, the thin-film
photocatalytic layer nearest the substrate being the lowermost of said thin-film photocatalytic
layers, the remaining layers being sequentially more distant from the substrate; and

wherein said plurality of thin-film photocatalytic layers consist of titanium oxide with an anatase structure.

Claim 66 (Canceled).

Claim 67 (Previously Presented): The photocatalytic member according to Claim 52,
wherein said titanium dioxide has an anatase structure.

Claims 68 - 69 (Canceled).

Claim 70 (Previously Presented): The photocatalytic member according to Claim 55, wherein said plurality of thin-film photocatalytic layers consist of titanium oxide with an anatase structure.

Claims 71-72 (Canceled).

Claim 73 (Previously Presented): The photocatalytic member according to Claim 58, wherein said plurality of thin-film photocatalytic layers consist of titanium oxide with an anatase structure.

Claims 74-79 (Canceled).

Claim 80 (Currently Amended): ~~The photocatalytic member according to Claim 50,~~
A photocatalytic member having photocatalytic and color forming properties; said member comprising:
a substrate; and
a laminate deposited on the substrate, which laminate has a plurality of thin-film photocatalytic layers, each consisting of a photocatalytic material, and a plurality of thin-film support layers;
wherein the plurality of thin-film photocatalytic layers and the plurality of thin-film support layers alternate with each other and contact sequentially at surface areas, wherein each thin-film support layer has a smaller surface area than the surface area of the contacting thin-film photocatalytic layers, leaving a space between adjacent photocatalytic layers and next to a support layer, said space being open to the outside of said member, the thin-film

photocatalytic layer nearest the substrate being the lowermost of said thin-film photocatalytic layers, the remaining layers being sequentially more distant from the substrate; and

wherein said plurality of thin-film photocatalytic layers consist of titanium oxide with an amorphous structure.

Claim 81 (Canceled).

Claim 82 (Currently Amended): The photocatalytic member according to Claim 52, wherein said plurality of thin-film photocatalytic layers consist of titanium oxide with has an amorphous structure.

Claims 83-84 (Canceled).

Claim 85 (Previously Presented): The photocatalytic member according to Claim 55, wherein said plurality of thin-film photocatalytic layers consist of titanium oxide with an amorphous structure.

Claims 86-87 (Canceled).

Claim 88 (Previously Presented): The photocatalytic member according to Claim 58, wherein said plurality of thin-film photocatalytic layers consist of titanium oxide with an amorphous structure.

Claims 89-95 (Canceled).

Claim 96 (New): The photocatalytic member according to Claim 65 further comprising an opening on a surface of said member and through a thin-film photocatalytic layer, and wherein a space communicates with the opening in order to be open to the outside of said member by way of the opening.

Claim 97 (New): The photocatalytic member according to Claim 65 wherein said plurality of thin-film support layers are made of one member selected from the group consisting of metals with a melting point of 400°C or higher, semiconductors and insulators.

Claim 98 (New): The photocatalytic member according to Claim 96, wherein said openings are shaped like parallel grooves.

Claim 99 (New): The photocatalytic member according to Claim 96, wherein said opening comprises a plurality of openings disposed at uniform intervals.

Claim 100 (New): The photocatalytic member according to Claim 96, wherein said opening comprises a plurality of openings disposed at nonuniform intervals.

Claim 101 (New): The photocatalytic member according to Claim 65, wherein the plurality of thin-film photocatalytic layers have surface areas equal to each other.

Claim 102 (New): The photocatalytic member according to Claim 65, wherein said plurality of thin-film photocatalytic layers have surface areas becoming larger toward the lowermost thin-film photocatalytic layer.

Claim 103 (New): The photocatalytic member according to Claim 65, wherein said plurality of thin-film photocatalytic layers have surface areas becoming smaller toward the lowermost thin-film photocatalytic layer.

Claim 104 (New): The photocatalytic member according to claim 80 further comprising an opening on a surface of said member and through a thin-film photocatalytic layer, and wherein a space communicates with the opening in order to be open to the outside of said member by way of the opening.

Claim 105 (New): The photocatalytic member according to Claim 65 wherein said plurality of thin-film support layers are made of one member selected from the group consisting of metals with a melting point of 400°C or higher, semiconductors and insulators.

Claim 106 (New): The photocatalytic member according to Claim 104, wherein said openings are shaped like parallel grooves.

Claim 107 (New): The photocatalytic member according to Claim 104, wherein said opening comprises a plurality of openings disposed at uniform intervals.

Claim 108 (New): The photocatalytic member according to Claim 104, wherein said opening comprises a plurality of openings disposed at nonuniform intervals.

Claim 109 (New): The photocatalytic member according to Claim 80, wherein the plurality of thin-film photocatalytic layers have surface areas equal to each other.

Claim 110 (New): The photocatalytic member according to Claim 80, wherein said plurality of thin-film photocatalytic layers have surface areas becoming larger toward the lowermost thin-film photocatalytic layer.

Claim 111 (New): The photocatalytic member according to Claim 80, wherein said plurality of thin-film photocatalytic layers have surface areas becoming smaller toward the lowermost thin-film photocatalytic layer.

Claim 112 (New): The photocatalytic member according to Claim 55, wherein said plurality of thin-film support layers are made of one member selected from the group consisting of metals, semiconductors and insulators, each with a melting point of 400°C or higher.

Claim 113 (New): The photocatalytic member according to Claim 55, wherein said openings are shaped like parallel grooves.

Claim 114 (New): The photocatalytic member according to Claim 55, wherein said opening comprises a plurality of openings disposed at uniform intervals.

Claim 115 (New): The photocatalytic member according to Claim 55, wherein said opening comprises a plurality of openings disposed at nonuniform intervals.

Claim 116 (New): The photocatalytic member according to Claim 55, wherein the surface areas of the layers of said laminated thin-film layers of photocatalytic material are equal to each other.

Claim 117 (New): The photocatalytic member according to Claim 55, wherein said plurality of thin-film photocatalytic layers have surface areas becoming larger toward the lowermost thin-film photocatalytic layer.

Claim 118 (New): The photocatalytic member according to Claim 58, wherein said plurality of thin-film support layers are made of one member selected from the group consisting of metals, semiconductors and insulators, each with a melting point of 400°C or higher.

Claim 119 (New): The photocatalytic member according to Claim 58, wherein said openings are shaped like parallel grooves.

Claim 120 (New): The photocatalytic member according to Claim 58, wherein said opening comprises a plurality of openings disposed at uniform intervals.

Claim 121 (New): The photocatalytic member according to Claim 58, wherein said opening comprises a plurality of openings disposed at nonuniform intervals.

Claim 122 (New): The photocatalytic member according to Claim 58, wherein the surface areas of the layers of said laminated thin-film layers of photocatalytic material are equal to each other.